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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,701	03/22/2005	Susumu Matsusaka	267493US2PCT	8935
22850	7590	02/20/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER BRASE, SANDRA L	
			ART UNIT	PAPER NUMBER
			2852	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/20/2007	ELECTRONIC

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# Office Action Summary

Application No.

10/528,701

Applicant(s)

MATSUSAKA, SUSUMU

Examiner

Sandra L. Brase

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,9,10 and 12-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 22-30 is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,9,10,12-21 and 31-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 13 contains limitations that have already been claimed by claim 2.
2. Claim 7 is objected to because of the following informalities: on lines 2 and 7 of claim 7, “secondary power supply” should be changed to “power supply” since no other power supply has been claimed. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Kinouchi et al. (US 6,522,846).

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5. Kinouchi et al. (...846) disclose an image forming apparatus having a power supply, comprising: a first connection terminal (76) provided on the chassis of the image forming apparatus and a second connection terminal (72) provided on the power supply, wherein one of the first connection terminal and the second connection terminal are male and the other is female (abstract; and col. 6, lines 3-42).

6. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Setoriyama (US 5,561,499).

7. Setoriyama (...499) discloses an image forming apparatus having a power supply, comprising: a first connection terminal (22) provided on the chassis of the image forming apparatus, and a second connection terminal (22a) provided on the power supply (col. 3, lines 18-36; col. 4, lines 15-22; and figures 4 and 5), wherein one of the first connection terminal and the second connection terminal are male and the other is female (figure 4).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 1, 5, 6, 9, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Hirose et al. (US 6,847,795), Nakafuji et al. (US 2003/0099479) and Baan (US 6,236,181).

Fujita et al. (...523) disclose an image forming apparatus comprising: a fixing unit (29) that fixes a toner image transferred to paper, and fixing unit further having a plurality of heaters (2a and 2b); a main power supply (3) that provides a portion of the heaters with voltage; and a secondary power supply (4) that provides another portion of the heaters with power charged by the main power supply ([0086]-[0090]). The secondary power supply comprising a circuit with a capacitor of high capacity ([0072]) and a discharging unit that discharges a charge stored in the capacitor ([0068], [0073], [0074], [0076], [0077], and figures 1-6), where it is obvious that the discharging unit could be controlled so as to discharge a charge stored when the secondary power supply is being maintained or replaced. A switch unit switches on and off electrical connection of the secondary power supply ([0068]). However, Fujita et al. (...523) do not disclose the claimed location of the secondary power supply, the insulation member, the wire size connecting the secondary power supply, the switch unit for a ventilation unit and cooling unit. Hirose et al. (...795) disclose an image forming apparatus including a power supply that is disposed below and in the neighborhood of a fixing unit (col. 5, lines 17-45; and figure 1). A switch unit that switches on and off a ventilation unit (120) for generating air flow in and around the power supply, where the ventilation unit is a cooling unit that cools an interior of the power supply (col. 11, lines 14-67). It would have been obvious to one of ordinary skill in the art at the time of the invention for the power supply to be placed at the claimed location, as disclosed by Hirose et al. (...795) since such a location for the placement of the power supply is well known

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in the art. Moreover, it would have also been obvious to one of ordinary skill in the art at the time of the invention to have the claimed switch, and ventilation and cooling unit, as disclosed by Hirose et al. (...795), so as to control a temperature in the vicinity of the power supply. Nakafuji et al. (...479) disclose an insulation member is disposed between the fixing unit and the power supply, where an insulation member insulation member is disposed so as to cover the secondary power supply ([0040]-[0041]). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the power supply located in the claimed location, as disclosed by Nakafuji et al. (...479), so as to protect the user and to keep away heat output from the fixing device. Baan (...181) discloses a wire connecting to a power supply is 14 AWG (col. 7, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the claimed wire size to connect to the power supply, as disclosed by Baan (...181), since it is notoriously well known to use such a size wire as wire to connect with a power supply.

10. Claims 2, 13-15, 18, 20 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Nakafuji et al. (US 2003/0099479) and Baan (US 6,236,181).

Fujita et al. (...523) disclose an image forming apparatus comprising: a fixing unit (29) that fixes a toner image transferred to paper, and fixing unit having a plurality of heaters (2a and 2b); a main power supply (3) that provides a portion of the heaters with voltage; and a secondary power supply (4) that provides another portion of the heaters with power charged by the main power supply ([0086]-[0090]). The secondary power supply comprising a circuit with a

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capacitor of high capacity ([0072]) and a discharging unit that discharges a charge stored in the capacitor ([0068], [0073], [0074], [0076], [0077], and figures 1-6), where it is obvious that the discharging unit could be controlled so as to discharge a charge stored when the secondary power supply is being maintained or replaced. However, Fujita et al. (...523) do not disclose the claimed placement of the power supply, and the claimed insulation. Nakafuji et al. (...479) disclose an image forming apparatus including placing a power supply between a side face of a chassis of the image forming apparatus and the fixing unit ([0026] and figure 1). An insulation member is disposed between the fixing unit and the power supply, where an insulation member insulation member is disposed so as to cover the secondary power supply ([0040]-[0041]). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the power supply located in the claimed location, as disclosed by Nakafuji et al. (...479), since such a placement of a power supply in an image forming apparatus is well known in the art. Furthermore, it would have also been obvious to one of ordinary skill in the art at the time of the invention to have the claimed insulation, as disclosed by Nakafuji et al. (...479) so as to protect the user and to keep away heat output from the fixing device. Baan (...181) discloses a wire connecting to a power supply is 14 AWG (col. 7, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the claimed wire size to connect to the power supply, as disclosed by Baan (...181), since it is notoriously well known to use such a size wire as wire to connect with a power supply.

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11. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Nakafuji et al. (US 2003/0099479) and Baan (US 6,236,181) as applied to claim 2 above, and further in view of Setoriyama (US 5,561,499).

12. Fujita et al. (...523) in view of Nakafuji et al. (...479) and Baan (...181) disclose the features mentioned previously, but do not disclose the claimed first and second connection terminals. Setoriyama (...499) discloses an image forming apparatus including a first connection terminal (22) provided on the chassis of the image forming apparatus and a second connection terminal (22a) that is electrically connected to the second power supply, the second connection terminal being connectable to the first connection terminal, where the first connection terminal and the second connection terminal are detachable (col. 3, lines 18-36; col. 4, lines 15-22; and figures 4 and 5). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed first and second connection terminals, as disclosed by Setoriyama (...499), so as to provide electrical connection.

13. Claims 19, 21, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Nakafuji et al. (US 2003/0099479) and Baan (US 6,236,181) as applied to claim 2 above, and further in view of Hirose et al. (US 6,847,795).

14. Fujita et al. (...523) in view of Nakafuji et al. (...479) and Baan (...181) disclose the features mentioned previously, where Fujita et al. (...523) disclose a switch unit switches on and off electrical connection of the secondary power supply ([0068]), but do not disclose the claimed switch unit for a ventilation unit and cooling unit. Hirose et al. (...795) disclose an image forming apparatus including a switch unit that switches on and off a ventilation unit (120) for



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generating air flow in and around the power supply, where the ventilation unit is a cooling unit that cools an interior of the power supply (col. 11, lines 14-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed switch for a ventilation unit and cooling unit, as disclosed by Hirose et al. (...795), so as to control a temperature in the vicinity of the power supply.

***Allowable Subject Matter***

15. Claims 3 and 22-30 are allowed.

***Response to Arguments***

16. Applicant's arguments with respect to claims 1, 25-7, 9, 10, 12-21 and 31-33 have been considered but are moot in view of the new ground(s) of rejection.

17. Applicant's arguments filed 11/13/06 have been fully considered but they are not persuasive.

18. Applicant argues that Nakafuji et al. (US 2003/0099479) do not disclose the claimed insulation member, however, this is incorrect. Nakafuji et al. (...479) disclose that an insulator is disposed between a fixing unit and a power supply, as explained above, thus teaching the claimed placement of an insulator.

19. Applicant also argues that Hirose et al. (US 6,847,795) do not disclose the claimed placement of a power supply, however, this is incorrect. As explained above, Hirose et al. (...795) disclose placing a power supply below and in the neighborhood of a fixing unit, thus teaching the claimed placement of a power supply.

***Final Rejection***

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

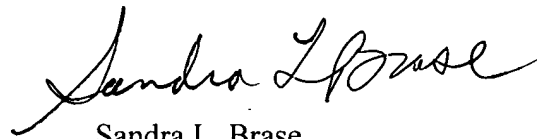
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is (571) 272-2131.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray, can be reached on (571) 272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Sandra L. Brase". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Sandra L. Brase  
Primary Examiner  
Art Unit 2852

February 2, 2007